DIRECT TESTIMONY

OF

GENE G. SOULT

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2005-2-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH SOUTH CAROLINA ELECTRIC & GAS COMPANY (SCE&G).

A. Gene G. Soult, 111 Research Drive, Columbia, South Carolina. I am employed by South Carolina Electric & Gas Company as General Manager of Fossil and Hydro Operations Services.

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE.

A. I have a B.A.S. in Management from Troy State University of Troy, Alabama, and a Master of Business Administration from Webster University. SCE&G employed me in June 1981, as a Control Room Foreman at V.C. Summer Nuclear Station. In October 1981, I became a Shift Supervisor at V.C. Summer Nuclear Station and continued to progress through the V.C. Summer management chain to ultimately become the General Manager, Nuclear Plant Operations in 1991. In 1992, I assumed the position of General Manager, Quality for SCE&G. In 1993, I became Manager, Cope Generating Station and maintained that position through construction, startup and initial commercial operation. In June 1997, I became General Manager, Technical Services in the Fossil/Hydro Division of SCE&G. Most recently, in January 2000, I assumed my current position of General Manager, Fossil & Hydro Operations. In this position, I report to the Vice President of Fossil & Hydro Operations.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to review the operating performance of South Carolina Electric & Gas Company's fossil units and South Carolina Generating Company's (GENCO's) Williams Electric Generating Station (Williams Station) during the period March 1, 2004, through January 31, 2005.

Q. PLEASE GIVE A SHORT DESCRIPTION OF SCE&G'S FOSSIL AND HYDRO ELECTRIC FACILITIES.

A. SCE&G owns and/or operates eighteen (18) coal fired fossil fuel units, eight (8) combined cycle gas turbine/steam generator units (gas/oil fired), eighteen (18) peaking turbines, and six (6) hydroelectric generating plants. The total net summer generating capability rating of these facilities is 5,242 megawatts.

Q. PLEASE EXPLAIN TO THE COMMISSION GENCO AND ITS RELATIONSHIP TO SCE&G.

A. GENCO was incorporated October 1, 1984, as a SCANA subsidiary. GENCO owns the Williams Station. GENCO sells to SCE&G the entire capacity and output from the Williams Station under a Unit Power Sales Agreement approved by the Federal Energy Regulatory Commission. Hereafter when I refer to SCE&G's fossil steam plants I include GENCO.

Q. HOW MUCH ELECTRICITY WAS GENERATED BY SCE&G IN THE TWELVE MONTH REVIEW PERIOD?

A. In the review period, SCE&G generated 23,821,100 megawatt hours of energy. Of this energy, the fossil steam plants generated 68%, the combined cycle units generated 6.496%, the gas peaking turbines and hydro facilities generated 4.504%, and the nuclear plant generated 21%. Exhibit No. ___ (GGS-1) provides a graphic display of how the generation met this review period's energy demand.

Q. PLEASE SUMMARIZE THE PERFORMANCE OF THE FOSSIL UNITS.

A. Overall, SCE&G's fossil units have operated efficiently and dependably in the eleven-month period of March 1, 2004, through January 31, 2005.

Our fossil units have operated better than the North American Electric Reliability Council ("NERC") national 5 year (1999-2003) average for forced outage rates and with reasonable heat rates. These measures will be covered later in my testimony.

Q. PLEASE DISCUSS SCE&G'S PLANNED OUTAGES FOR THE PERIOD UNDER REVIEW.

A. Major maintenance outages were scheduled and conducted at the Williams and McMeekin units 1 & 2. The Williams outage consisted of a major maintenance inspection of the Main Turbine components and a rewind of the main generator unit. During this time we also inspected all major plant equipment and initiated repairs, where necessary to ensure the continued reliability of the Williams Unit. We also performed the tie-in of the Williams Selective Catalytic Reactor (SCRs) to reduce NOx emissions required by the Clean Air Act and the Environmental Protection Agency's (EPA) State Implementation Plan (commonly referred to as SIP Call). New air preheaters were constructed and duct work performed to facilitate the SCR tie-in. Additionally, we stabilized boiler tubing in the upper sections of the furnace, rebuilt two boilers feed pumps, upgraded the furnace burner management system and rebuilt the lower furnace bottom ash hoppers.

McMeekin units 1 & 2 were scheduled off in the fall of 2004 to complete phase two of the tie-in of new cooling water piping as part of the construction of the new backup Saluda Dam, and to install Separated Overfire Air (SOFA) on each unit which will further enhance our NOx reduction to meet the State Implementation Plan. McMeekin also conducted a generator rewind on Unit one and performed a high pressure urbine major inspection on Unit 2.

Q. WHAT HAS BEEN SCE&G'S SYSTEM FORCED OUTAGE RATE FOR THE PERIOD UNDER REVIEW?

A. SCE&G experienced a system forced outage rate on its fossil fueled steam units of 1.98% in the review period. "Forced outage rate" is the percentage of the total hours that generating units are forced out of service (for various reasons) compared with the total hours in service for a period. The North American Electric Reliability Council ("NERC") national 5 year (1999-2003) average for forced outage rate for similarly sized units is 5.02%.

Q. PLEASE DISCUSS THE AVAILABILITY OF SCE&G'S FOSSIL PLANTS DURING THE REVIEW PERIOD.

A. SCE&G had an availability of its fossil plants of 85.99% for the review period. Availability is a measure of the actual hours that the generation units are available (overall readiness to provide electricity) divided by the total hours in the eleven-month review period. Availability is not affected by how the unit is dispatched or by the demand from the system when connected to the grid. However, it is impacted by the planned and maintenance shutdown hours. The North American Electric Reliability Council ("NERC") national 5 year (1999-2003) average for availability from similar sized pulverized coal fired units was 86.86%. SCE&G's availability was slightly lower than the NERC national 5-year average due to the timing and duration of the normal planned and maintenance shutdown hours associated with equipment maintenance outages and environmental compliance investments. However, during the peak period, June 1, 2003, thru September 30, 2003, SCE&G operated at an availability of 95.03%.

Q. WHAT HAS BEEN THE HEAT RATE OF THE FOSSIL UNITS DURING THE REVIEW PERIOD?

A. Heat rate is a way to measure thermal efficiency of a power plant fuel cycle. It is the number of Btu's (British Thermal Units) of fuel required to generate one (1) kilowatt-hour (kWh) of electricity.

The combined steam unit's heat rate for the period March 1, 2004 through January 31, 2005 is 9655 Btu/kWh. Cope Station had the best heat rate in our system at 9163 Btu/kWh followed by McMeekin Station at 9484 Btu/kWh. In the November 2004 issue of *Electric Light & Power*, SCE&G was recognized by having three of its plants listed in the top 20 most energy efficient coal fired plants in the nation for 2003. Cope Station ranked 3rd, at 9190 Btu/kWh, McMeekin was ranked 14th at 9545 Btu/kWh, and Williams Station ranked 17th at 9592 Btu/kWh.

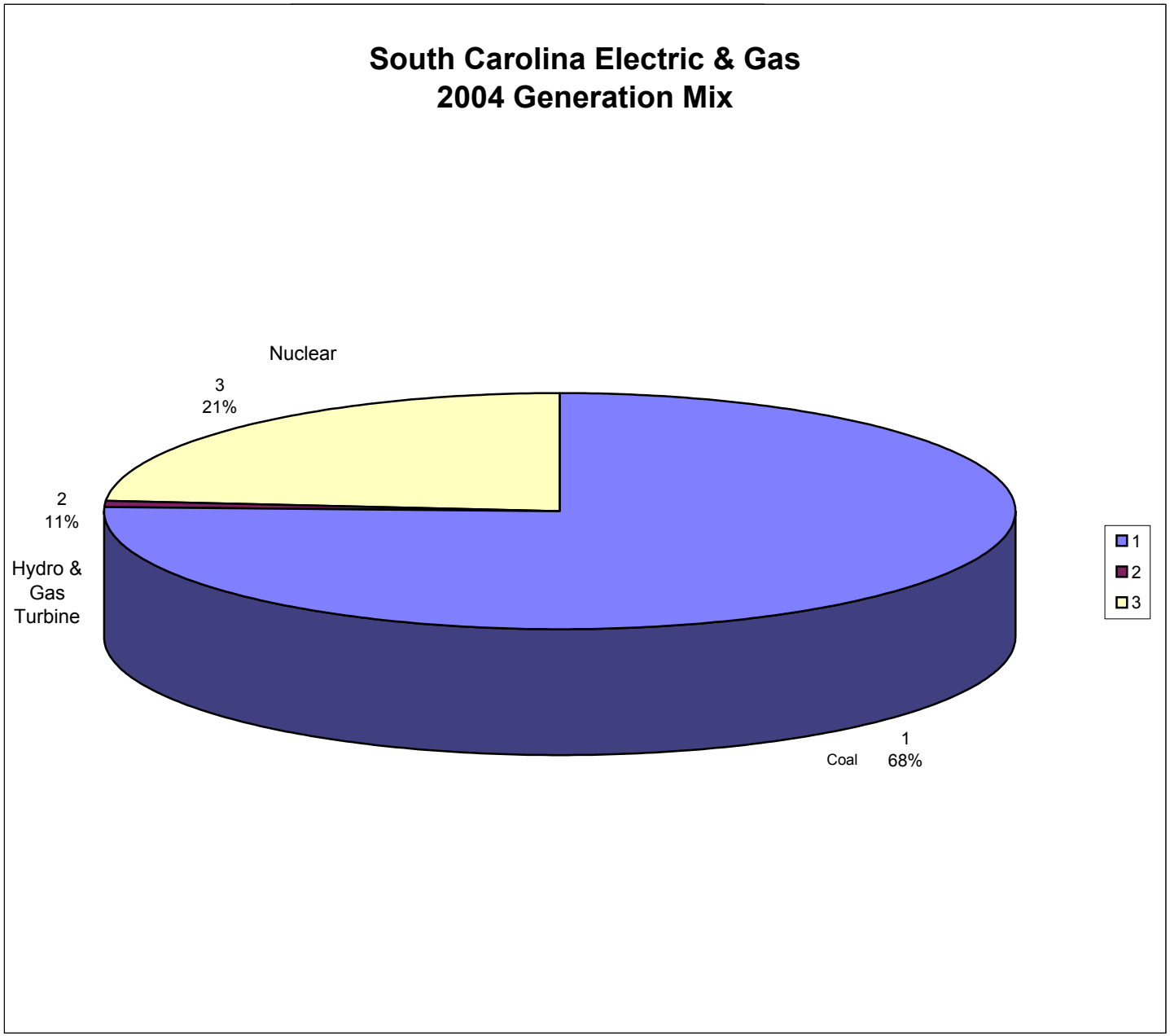
Q. HOW IS NATURAL GAS PROCURED FOR THE COMBUSTION AND COMBINED CYCLE TURBINES?

A. SCE&G contracts with Southern Natural Gas Company for 50,000 DTH (dekatherms) of firm transportation service per day to serve the Urquhart Combined Cycle Units. SCANA Services, Inc., procures natural gas for this facility.

SCE&G has a contract with SCANA Energy Marketing, Inc., to supply 120,000 DTH of firm gas service for the Jasper Facility. SCE&G's other peaking turbines are located either on South Carolina Pipeline Corporation's system or on SCE&G's system and are served pursuant to standard contracts filed with the Commission.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.


South Carolina Electric & Gas
2004 Generation Mix
Nuclear
3
21%
2
11%
Hydro &
Gas
Turbine
1
Coal
68%
1
2
3